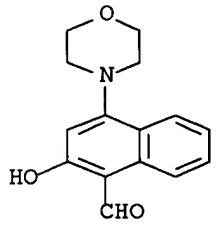
L10 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:115056 CAPLUS Full-text
DN 143:348667
TI Making light work in colour chemistry
AU Aiken, S.; Gabbutt, C. D.; Heron, B. M.; Instone, A. C.; Horton, P. N.; Hursthouse, M. B.
CS Department of Colour and Polymer Chemistry, The University of Leeds, Leeds, LS2 9JT, UK
SO Advances in Colour Science and Technology (2004), 7(3), 55-65
CODEN: ACOSF9; ISSN: 1462-4761
PB University of Leeds, Dep. of Colour Chemistry
DT Journal
LA English
AB The synthesis and photochromic properties of a range of 3-aryl-3-(4-pyrrolidinophenyl)-3H-naphtho[2,1-b]pyrans are described. Altering the size of a substituent located in an ortho position of the 3-aryl group allows the rate of fade of the photo-generated color to be controlled without significantly influencing λmaximum Conversely, varying the size of a group adjacent to the 4-pyrrolidinophenyl unit enables λmax to be manipulated, while the rate of fade of the colored species appears to be relatively insensitive to these changes. Increasing the size of a substituent located meta to the pyrrolidine unit results in the introduction of a second band in the absorption spectrum of the photo-generated species. O-Quinone methides derived from o-hydroxynaphthaldehydes have been reinvestigated as precursors to photochromic naphthopyrans. Only moderate yields of naphthopyrans result from this strategy with 1- and 2- hydroxynaphthaldehydes.
IT **227295-55-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation and properties of photochromic naphthopyrans)
RN 227295-55-8 CAPLUS
CN 1-Naphthalenecarboxaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

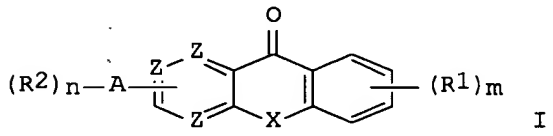


RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

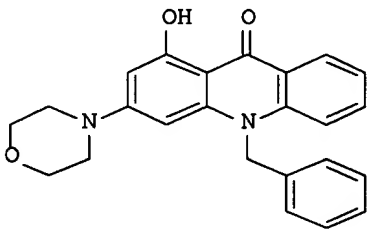
L10 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:817876 CAPLUS Full-text
DN 141:314155
TI Preparation of xanthenone and acridinone DNA-PK inhibitors as cancer treatment potentiators
IN Halbrook, James W.; Kesicki, Edward A.; Burgess, Laurence Edward; Schlachter, Stephen T.; Eary, Charles T.; Schiro, Justin G.
PA Icos Corporation, USA
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004085418	A2	20041007	WO 2004-US8459	20040319
	WO 2004085418	A3	20050127		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004223866	A1	20041007	AU 2004-223866	20040319
	CA 2523178	AA	20041007	CA 2004-2523178	20040319
PRAI	US 2003-456999P	P	20030324		
	WO 2004-US8459	W	20040319		

OS MARPAT 141:314155
GI



I



II

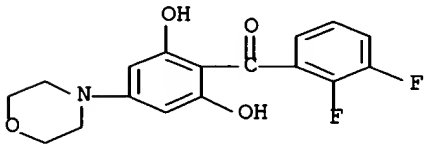
AB Title compds. I [wherein m = 0-3; n = 0-4; X = O, SO0-2, NRa; Z = independently CRb, N; A = heteroaryl; R1 = independently halo (un)substituted (cyclo)alkyl, heterocyclylalkyl, amino carboxy, phosphoryl, acyl, (hetero)aryl, etc.; R2 = independently halo, CHO, (un)substituted alkyl, (hetero)aryl, carbamoyl, carboxy, etc.; R1 = H, (cyclo)alkyl, (hetero)aryl, carboxy, carbamoyl, etc.; Rb = independently H, alkyl, halo, CHO, alkoxy,

phosphoryl, amino, carboxy, etc.; and pharmaceutically acceptable salts and prodrugs thereof] were prepared as DNA-dependent protein kinase (DNA-PK) inhibitors. I and their pharmaceutical compns. potentiate cancer treatment by sensitizing cells to an agent that induces DNA lesions. For example, condensation of 1,3-dihydroxy-10H-acridin-9-one with trifluoromethanesulfonic anhydride gave the triflate. Pd-catalyzed substitution of the monoester with morpholine, followed by benzylation provided II. The latter inhibited DNA-PK induced phosphorylation of a p53 peptide substrate with a IC50 of 20 nM.

IT **767357-66-4P**, (2,3-Difluorophenyl)[2,6-dihydroxy-4-(morpholin-4-yl)phenyl]methanone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of xanthenone and acridinone DNA-PK inhibitors as
cancer treatment potentiators)

RN 767357-66-4 CAPLUS

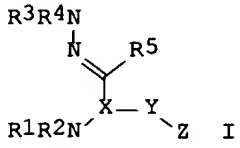
CN Methanone, (2,3-difluorophenyl)[2,6-dihydroxy-4-(4-morpholinyl)phenyl]-(9CI) (CA INDEX NAME)



L10 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:631293 CAPLUS Full-text
DN 141:181906
TI Organophotoreceptor with charge transport material having an amino-substituted hydrazone group and an epoxy group
IN Tokarski, Zbigniew; Jubran, Nusrallah; Montrimas, Edmundas; Gavutiene, Janina; Getautis, Vytautas; Law, Kam W.; Daskeviciene, Maryte
PA Samsung Electronics Co., Ltd., S. Korea
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1443365	A1	20040804	EP 2004-250291	20040121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2004157145	A1	20040812	US 2003-749164	20031230
	JP 2004234012	A2	20040819	JP 2004-23802	20040130
	CN 1550916	A	20041201	CN 2004-10059579	20040130
PRAI	US 2003-444001P	P	20030131		
	US 2003-749164	A	20031230		

OS MARPAT 141:181906
GI

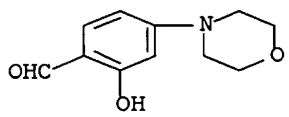


I

AB The present invention provides an organo photoreceptor comprising an elec. conductive substrate and a photoconductive element on the elec. conductive substrate, the photoconductive element comprising: (a) a charge transport material having the formula I (R1-4 = alkyl group, alkaryl group, aryl group, or a part of a cyclic group; R5 = H, alkyl group, alkaryl group, aryl group, heterocyclic group; X comprises an aromatic group, such as an aryl group or an aromatic heterocyclic group; Y = -(CH2)m-; m = 1-20; inclusive, and one or more of the methylene groups is optionally replaced Z comprises an epoxy group); and (b) a charge generating compound Corresponding electrophotog. apparatuses and imaging methods are described.

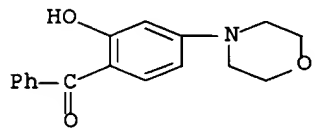
IT **70362-07-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of charge transport material for electrophotog. organo photoreceptor)

RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

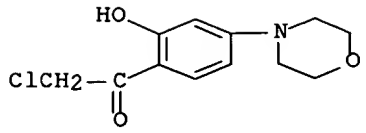


RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

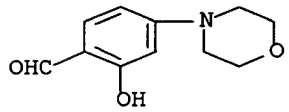
L10 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:627189 CAPLUS Full-text
DN 141:314266
TI Isoform-specific phosphoinositide 3-kinase inhibitors from an arylmorpholine scaffold
AU Knight, Zachary A.; Chiang, Gary G.; Alaimo, Peter J.; Kenski, Denise M.; Ho, Caroline B.; Coan, Kristin; Abraham, Robert T.; Shokat, Kevan M.
CS Program in Chemistry and Chemical Biology, University of California, San Francisco, CA, 94143, USA
SO Bioorganic & Medicinal Chemistry (2004), 12(17), 4749-4759
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Ltd.
DT Journal
LA English
OS CASREACT 141:314266
AB Phosphoinositide 3-kinases (PI3-Ks) are an ubiquitous class of signaling enzymes that regulate diverse cellular processes including growth, differentiation, and motility. Physiol. roles of PI3-Ks have traditionally been assigned using two pharmacol. inhibitors, LY294002 and wortmannin. Although these compds. are broadly specific for the PI3-K family, they show little selectivity among family members, and the development of isoform-specific inhibitors of these enzymes has been long anticipated. Herein, the preparation of two classes of arylmorpholine PI3-K inhibitors and the characterization of their specificity against a comprehensive panel of targets within the PI3-K family are reported. Multiplex inhibitors that potently inhibit distinct subsets of PI3-K isoforms, including the first selective inhibitor of p110β/p110δ (IC50 p110β = 0.13 μM, p110δ = 0.63 μM), were identified. Trends that suggest certain PI3-K isoforms may be more sensitive to potent inhibition by arylmorpholines, thereby guiding future drug design based on this pharmacophore, were also identified.
IT **404009-46-7P**, AMA 37
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation AMA 37 and study of its activity as isoform-specific phosphoinositide 3-kinase inhibitor)
RN 404009-46-7 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl]phenyl- (9CI) (CA INDEX NAME)



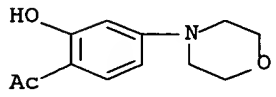
IT **404010-44-2P**, AMA 48
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation AMA 48 and study of its activity as isoform-specific phosphoinositide 3-kinase inhibitor)
RN 404010-44-2 CAPLUS
CN Ethanone, 2-chloro-1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



IT **70362-07-1P**, IC 60211
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation IC 60211 and study of its activity as isoform-specific phosphoinositide 3-kinase inhibitor)
RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

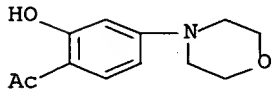


IT **404009-40-1P**, IC 86621
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation IC 86621 and study of its activity as isoform-specific phosphoinositide 3-kinase inhibitor)
RN 404009-40-1 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

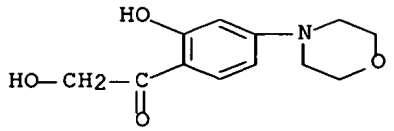


RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

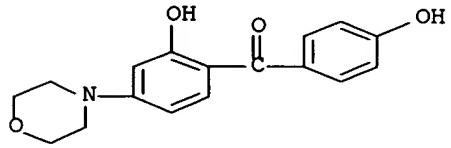
L10 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:7906 CAPLUS Full-text
DN 140:368226
TI DNA-dependent protein kinase inhibitors as drug candidates for the treatment of cancer
AU Kashishian, Adam; Douangpanya, Heather; Clark, Darcey; Schlachter, Stephen T.; Eary, C. Todd; Schiro, Justin G.; Huang, Hongmei; Burgess, Larry E.; Kesicki, Edward A.; Halbrook, James
CS ICOS Corporation, Bothell, WA, USA
SO Molecular Cancer Therapeutics (2003), 2(12), 1257-1264
CODEN: MCTOCF; ISSN: 1535-7163
PB American Association for Cancer Research
DT Journal
LA English
AB Cancer presents a difficult challenge for oncologists, as there are few therapies that specifically target disease cells. Existing treatment strategies rely heavily on phys. and chemical agents that nonspecifically affect DNA metabolism To improve the effectiveness of these treatments, we have identified a new class of protein kinase inhibitor that targets a major DNA repair pathway. A representative of this class, 1-(2-hydroxy-4-morpholin-4-yl-phenyl)-ethanone, inhibits the DNA-dependent protein kinase (DNA-PK) and differs significantly from previously studied DNA-PK inhibitors both structurally and functionally. DNA-PK participates in the cellular response to and repair of chromosomal DNA double-strand breaks (DSBs). These new selective inhibitors recapitulate the phenotype of DNA-PK defective cell lines including those from SCID mice. These compds. directly inhibit the repair of DNA DSBs and consequently enhance the cytotoxicity of phys. and chemical agents that induce DSBs but not other DNA lesions. In contrast to previously studied DNA-PK inhibitors, these compds. appear benign, exhibiting no toxic effects in the absence of DSB-inducing treatments. Most importantly, 1-(2-hydroxy-4-morpholin-4-yl- phenyl)-ethanone synergistically enhances radiation-induced tumor control in a mouse-human xenograft assay. These studies validate DNA-PK as a cancer drug target and suggest a new approach for enhancing the effects of existing cancer therapies.
IT **404009-40-1 404011-13-8 683270-05-5**
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(DNA-dependent protein kinase inhibitors as drug candidates for treatment of cancer in relation to RPA phosphorylation)
RN 404009-40-1 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



RN 404011-13-8 CAPLUS
CN Ethanone, 2-hydroxy-1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

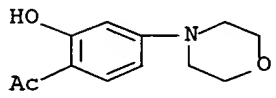


RN 683270-05-5 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl](4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:830035 CAPLUS Full-text
DN 140:317212
TI Interactive Competition Between Homologous Recombination and Non-Homologous End Joining
AU Allen, Chris; Halbrook, James; Nickoloff, Jac A.
CS Department of Molecular Genetics and Microbiology, University of New Mexico School of Medicine, Albuquerque, NM, 87131, USA
SO Molecular Cancer Research (2003), 1(12), 913-920
CODEN: MCROC5; ISSN: 1541-7786
PB American Association for Cancer Research
DT Journal
LA English
AB DNA-dependent protein kinase (DNA-PK), composed of Ku70, Ku80, and the catalytic subunit (DNA-PKcs), is involved in double-strand break (DSB) repair by non-homologous end joining (NHEJ). DNA-PKcs defects confer ionizing radiation sensitivity and increase homologous recombination (HR). Increased HR is consistent with passive shunting of DSBs from NHEJ to HR. We therefore predicted that inhibiting the DNA-PKcs kinase would increase HR. A novel DNA-PKcs inhibitor (1-(2-hydroxy-4-morpholin-4-yl-phenyl)- ethanone; designated IC86621) increased ionizing radiation sensitivity but surprisingly decreased spontaneous and DSB-induced HR. Wortmannin also inhibits DNA-PKcs and reduces DSB-induced HR. IC86621 did not affect HR product outcome, indicating that it affects HR initiation. Thus, HR is increased in the absence of DNA-PKcs, but decreased when DNA-PKcs is catalytically inactive, suggesting interactive competition between HR and NHEJ. The effects of IC86621 and wortmannin were proportional to the level of DNA-PKcs, consistent with inhibited DNA-PKcs acting in a dominant neg. manner. We propose that inhibition of DNA-PKcs blocks its autophosphorylation, prevents dissociation of DNA-PKcs from DNA ends, and thereby blocks both HR and NHEJ. By blocking the two major DSB repair pathways, DNA-PKcs inhibitors should radiosensitize at all cell-cycle stages and are therefore excellent candidates for augmenting cancer radiotherapy.
IT **404009-40-1**, IC 86621
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(interactive competition between homologous recombination and non-homologous end joining: DNA-PKcs inhibitors as radiosensitizers)
RN 404009-40-1 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:696882 CAPLUS Full-text
DN 139:230615
TI Preparation of benzofurans and benzothiophenes useful in the treatment of hyperproliferative disorders
IN Zhang, Chengzhi; Burke, Michael; Chen, Zhi; Dumas, Jacques; Fan, Dongping; Fan, Jianmei; Hatoum-Mokdad, Holia; Jones, Benjamin D.; Ladouceur, Gaetan; Lee, Wendy; Phillips, Barton
PA Bayer Pharmaceuticals Corporation, USA
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003072561	A1	20030904	WO 2003-US5396	20030221
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2474511	AA	20030904	CA 2003-2474511	20030221
	AU 2003213219	A1	20030909	AU 2003-213219	20030221
	EP 1487813	A1	20041222	EP 2003-709265	20030221
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1639146	A	20050713	CN 2003-804436	20030221
	CN 1639145	A	20050713	CN 2003-804442	20030221
	JP 2006507215	T2	20060302	JP 2003-571267	20030221
	BR 2003007905	A	20060404	BR 2003-7905	20030221
	ZA 2004007482	A	20050919	ZA 2004-7482	20040917
	NO 2004003952	A	20041022	NO 2004-3952	20040921
PRAI	US 2002-359011P	P	20020222		
	US 2002-399886P	P	20020731		
	WO 2003-US5396	W	20030221		

OS MARPAT 139:230615
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

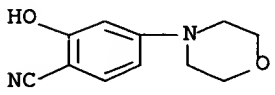
AB Title compds. I [wherein X = O, S; R1 = H, alkyl, (CO)alkyl, benzoyl; R2 = (un)substituted Ph, naphthyl, (un)substituted heterocyclyl; R3 = H, OH, CN, alkyl, alkoxy, halo, haloalkyl, haloalkoxy; R4 = piperonyl, (un)substituted heterocyclyl, Ph and naphthyl; R5, R6 = independently H, OH, CN, alkyl, alkoxy, halo, haloalkyl and haloalkoxy; and their pharmaceutically acceptable salts or esters] were prepared as antitumor agents for treatment of hyperproliferative disorders. For example, II was prepared from 2-bromo-3'-methoxy-acetophenone by cyclocondensation with acetamide at 110° for 40 h, demethylation in DCM at room temperature for 2 h, reaction with paraformaldehyde in CH3CN/TEA in the presence of MgCl2 at reflux for 17 h, reaction with nitroethane in AcOH/AcONa at reflux for 17 h, and K2CO3-

catalyzed cyclocondensation of the resultant nitrile with 2-methoxyphenacyl bromide in anhydrous DMF. III was prepared, in 28.2% yield, by Pd-cross coupling of (3-amino-6-iodo-1-benzothiophene-2-yl)(2,4-dichlorophenyl)methanone with pyridine-3-boronic acid in 1,2-dimethoxyethane at 80° for 18 h. I showed a significant inhibition of tumor cell proliferation in the adherent tumor cell proliferation assay (no data). Thus, I and their formulations are useful as antitumor agents (no data).

IT **404009-32-1P**, 2-Hydroxy-4-(morpholin-4-yl)benzonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzofurans and benzothiophenes for treatment of hyper-proliferative disorders)

RN 404009-32-1 CAPLUS

CN Benzonitrile, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

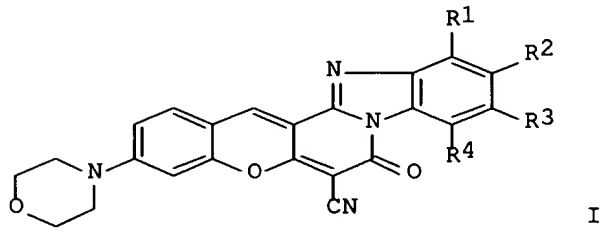


RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:247796 CAPLUS Full-text
DN 136:270284
TI Benzopyran-type orange to red dye and organic electroluminescent device
IN Sato, Hideki; Sato, Yoshiharu; Endo, Kyoko; Murata, Yukichi
PA Mitsubishi Chemical Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002097382	A2	20020402	JP 2000-284749	20000920
PRAI	JP 2000-284749		20000920		

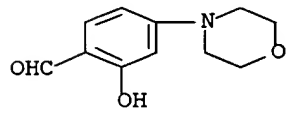
OS MARPAT 136:270284
GI



I

AB The morpholine-substituted benzopyran dye is that represented as I (R1-R4 = H, substituent; any groups in R1-R4 may form rings). The electroluminescent device involves a substrate, an anode, an organic layer, and a cathode laminated in this order wherein the organic layer contains I. The orange to red dye is suitable for thin film electroluminescent devices.

IT **70362-07-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of morpholine-substituted benzopyran-type orange to red dye
for organic electroluminescent device)
RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

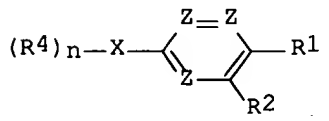


Appl's

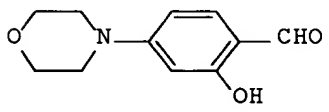
L10 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:185097 CAPLUS Full-text
DN 136:247591
TI Preparation of arylmorpholines as inhibitors of DNA-dependent protein kinase and methods to potentiate cancer treatment
IN Halbrook, James; Kesicki, Edward; Burgess, Laurence E.; Schlachter, Stephen T.; Eary, Charles T.; Schiro, Justin G.; Huang, Hongmei; Evans, Michael; Han, Yongxin
PA Icos Corporation, USA
SO PCT Int. Appl., 247 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002020500	A2	20020314	WO 2001-US26709	20010828
	WO 2002020500	A3	20030731		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001088432	A5	20020322	AU 2001-88432	20010828
	US 2002165218	A1	20021107	US 2001-941897	20010828
	EP 1351946	A2	20031015	EP 2001-968164	20010828
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-229899P	P	20000901		
	WO 2001-US26709	W	20010828		

OS MARPAT 136:247591
GI



I



II

AB Compds. that inhibit DNA-dependent protein kinase, I [n = 0-4; X = (un)substituted 4-7 membered aliphatic ring containing 0-3 heteroatoms consisting of N, O and S (X = morpholinyl preferred); Z = independently N or CR3; R3 = independently H, halo, CHO, alkoxy, etc.; R1 = H, (un)substituted

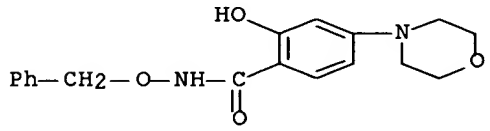
alkyl, cycloalkyl, CO, NO2, etc.; R2 = H, (un)substituted alkyl, carbamoyl, alkoxy, sulfamyl, etc.; with provision when X = morpholinyl, R2 and R4 and R3 = H at each occurrence, then R1 is different from COMe, phenylalkene, and NO2; and with the provision that when X = morpholinyl, R4 = H and Z = N at each occurrence, then R1 and R2 when taken together is different from triazole], were prepared and compns. of I with other antineoplastic agents are claimed for use in cancer treatment therapy. Thus, II was prepared in 23% yield via formylation of 3-(4-morpholinyl)phenol. II demonstrated an IC50 value of 400 nM in DNA-PK assay. Preliminary results of animal tumor model studies indicate II enhanced the tumoristatic effect of total body irradiation (using 100-500 rad γ-radiation, II delayed tumor growth 1.2 to 1.8-fold relative to animals receiving radiation only).

IT **404011-22-9**

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of arylmorpholines as inhibitors of DNA-dependent protein kinase for cancer treatment)

RN 404011-22-9 CAPLUS

CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-(phenylmethoxy)- (9CI) (CA INDEX NAME)

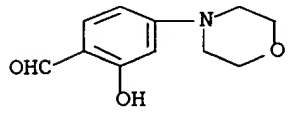


IT **70362-07-1P 404009-40-1P**

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(target compound; preparation of arylmorpholines as inhibitors of DNA-dependent protein kinase for cancer treatment)

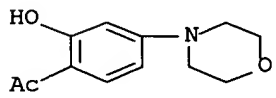
RN 70362-07-1 CAPLUS

CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



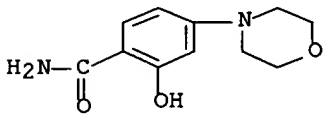
RN 404009-40-1 CAPLUS

CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

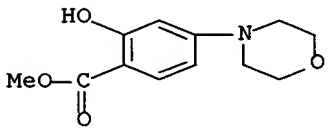


IT **37893-38-2P 207850-94-0P 404009-32-1P**
404009-98-9P 404010-21-5P 404010-32-8P
404010-44-2P 404010-52-2P 404011-08-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(target compound; preparation of arylmorpholines as inhibitors of DNA-dependent protein kinase for cancer treatment)

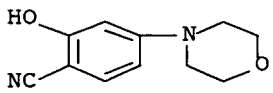
RN 37893-38-2 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



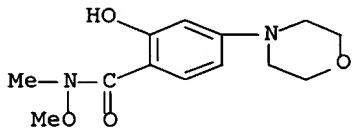
RN 207850-94-0 CAPLUS
CN Benzoic acid, 2-hydroxy-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 404009-32-1 CAPLUS
CN Benzonitrile, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

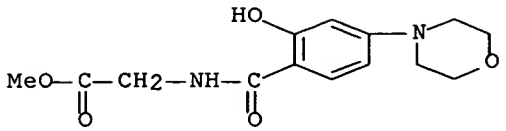


RN 404009-98-9 CAPLUS
CN Benzamide, 2-hydroxy-N-methoxy-N-methyl-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

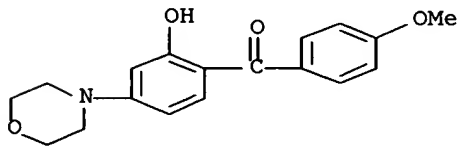


RN 404010-21-5 CAPLUS
CN Glycine, N-[2-hydroxy-4-(4-morpholinyl)benzoyl]-, methyl ester (9CI) (CA

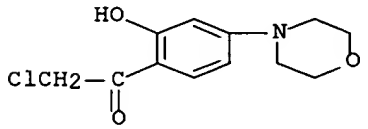
INDEX NAME)



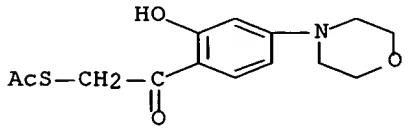
RN 404010-32-8 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl](4-methoxyphenyl)- (9CI) (CA INDEX NAME)



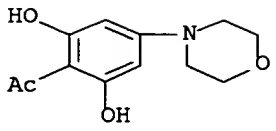
RN 404010-44-2 CAPLUS
CN Ethanone, 2-chloro-1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



RN 404010-52-2 CAPLUS
CN Ethanethioic acid, S-[2-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-oxoethyl] ester (9CI) (CA INDEX NAME)

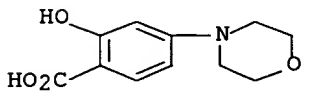


RN 404011-08-1 CAPLUS
CN Ethanone, 1-[2,6-dihydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

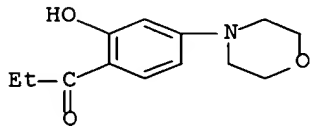


IT **404009-36-5P 404009-42-3P 404009-44-5P**
404009-46-7P 404009-48-9P 404009-52-5P
404009-54-7P 404009-56-9P 404009-58-1P
404009-60-5P 404009-62-7P 404009-86-5P
404009-88-7P 404009-90-1P 404009-92-3P
404009-94-5P 404009-96-7P 404010-00-0P
404010-02-2P 404010-04-4P 404010-06-6P
404010-08-8P 404010-10-2P 404010-12-4P
404010-14-6P 404010-16-8P 404010-18-0P
404010-23-7P 404010-25-9P 404010-29-3P
404010-30-6P 404010-34-0P 404010-36-2P
404010-38-4P 404010-40-8P 404010-42-0P
404010-43-1P 404010-45-3P 404010-46-4P
404010-47-5P 404010-49-7P 404010-50-0P
404010-51-1P 404010-53-3P 404011-13-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of arylmorpholines as inhibitors of DNA-dependent protein kinase for cancer treatment)

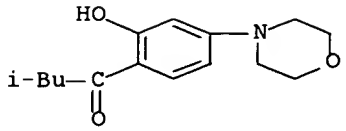
RN 404009-36-5 CAPLUS
CN Benzoic acid, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



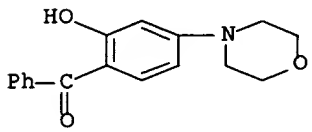
RN 404009-42-3 CAPLUS
CN 1-Propanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



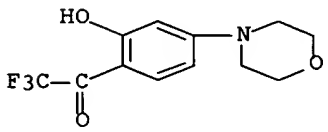
RN 404009-44-5 CAPLUS
CN 1-Butanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-methyl- (9CI) (CA INDEX NAME)



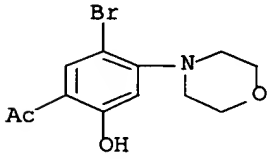
RN 404009-46-7 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl]phenyl- (9CI) (CA INDEX NAME)



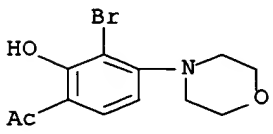
RN 404009-48-9 CAPLUS
CN Ethanone, 2,2,2-trifluoro-1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



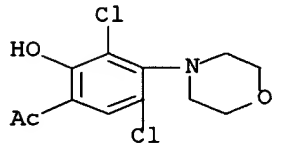
RN 404009-52-5 CAPLUS
CN Ethanone, 1-[5-bromo-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



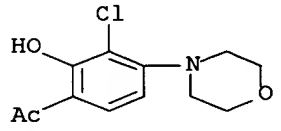
RN 404009-54-7 CAPLUS
CN Ethanone, 1-[3-bromo-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



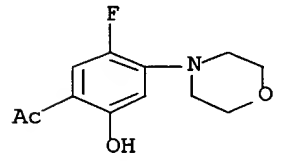
RN 404009-56-9 CAPLUS
CN Ethanone, 1-[3,5-dichloro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



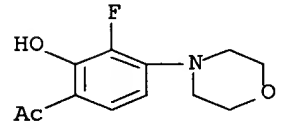
RN 404009-58-1 CAPLUS
CN Ethanone, 1-[3-chloro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



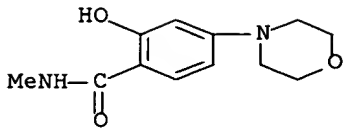
RN 404009-60-5 CAPLUS
CN Ethanone, 1-[5-fluoro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



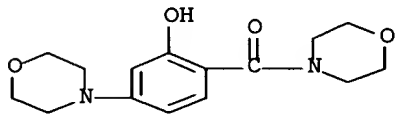
RN 404009-62-7 CAPLUS
CN Ethanone, 1-[3-fluoro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



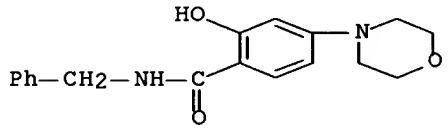
RN 404009-86-5 CAPLUS
CN Benzamide, 2-hydroxy-N-methyl-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



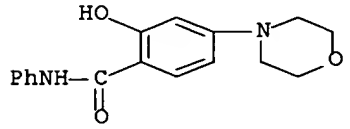
RN 404009-88-7 CAPLUS
CN Morpholine, 4-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



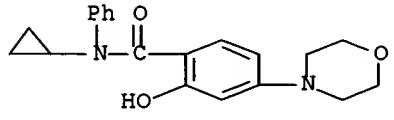
RN 404009-90-1 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



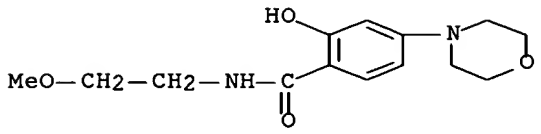
RN 404009-92-3 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-phenyl- (9CI) (CA INDEX NAME)



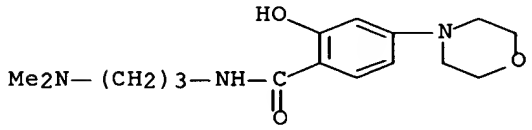
RN 404009-94-5 CAPLUS
CN Benzamide, N-cyclopropyl-2-hydroxy-4-(4-morpholinyl)-N-phenyl- (9CI) (CA INDEX NAME)



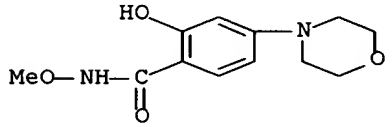
RN 404009-96-7 CAPLUS
CN Benzamide, 2-hydroxy-N-(2-methoxyethyl)-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



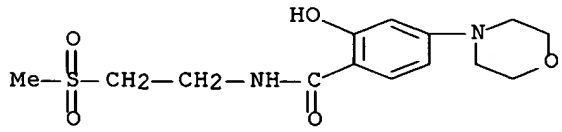
RN 404010-00-0 CAPLUS
CN Benzamide, N-[3-(dimethylamino)propyl]-2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



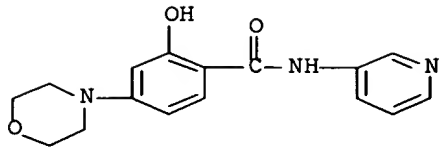
RN 404010-02-2 CAPLUS
CN Benzamide, 2-hydroxy-N-methoxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



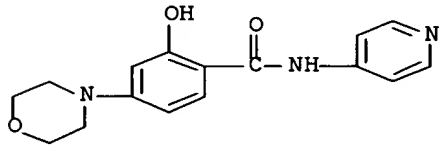
RN 404010-04-4 CAPLUS
CN Benzamide, 2-hydroxy-N-[2-(methylsulfonyl)ethyl]-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



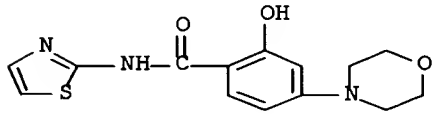
RN 404010-06-6 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-3-pyridinyl- (9CI) (CA INDEX NAME)



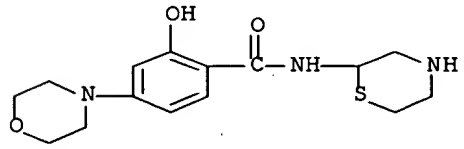
RN 404010-08-8 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-4-pyridinyl- (9CI) (CA INDEX NAME)



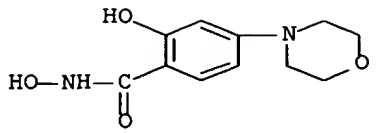
RN 404010-10-2 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-2-thiazolyl- (9CI) (CA INDEX NAME)



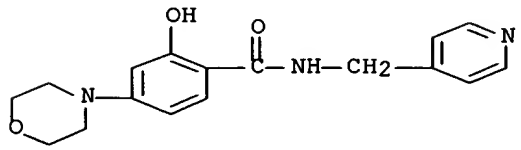
RN 404010-12-4 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-2-thiomorpholinyl- (9CI) (CA INDEX NAME)



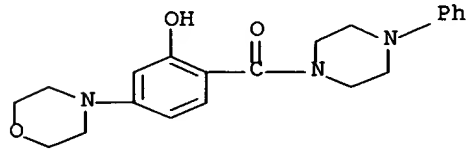
RN 404010-14-6 CAPLUS
CN Benzamide, N,2-dihydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



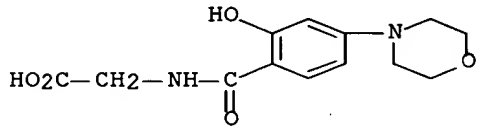
RN 404010-16-8 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)



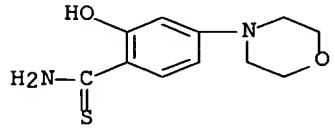
RN 404010-18-0 CAPLUS
CN Piperazine, 1-[2-hydroxy-4-(4-morpholinyl)benzoyl]-4-phenyl- (9CI) (CA INDEX NAME)



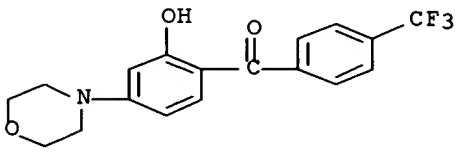
RN 404010-23-7 CAPLUS
CN Glycine, N-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



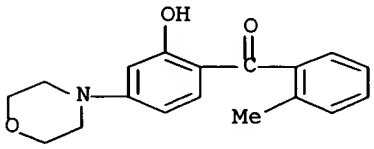
RN 404010-25-9 CAPLUS
CN Benzenecarbothioamide, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



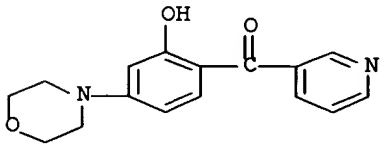
RN 404010-29-3 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl][4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



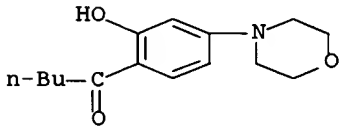
RN 404010-30-6 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl](2-methylphenyl)- (9CI) (CA INDEX NAME)



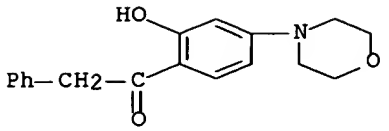
RN 404010-34-0 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl]-3-pyridinyl- (9CI) (CA INDEX NAME)



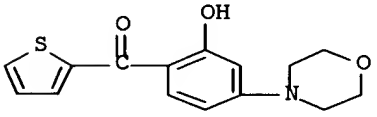
RN 404010-36-2 CAPLUS
CN 1-Pentanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



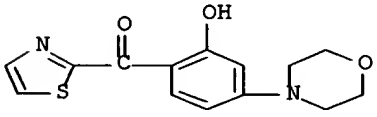
RN 404010-38-4 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-phenyl- (9CI) (CA INDEX NAME)



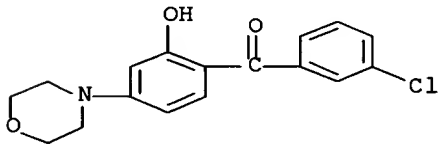
RN 404010-40-8 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl]-2-thienyl- (9CI) (CA INDEX NAME)



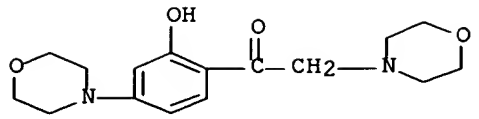
RN 404010-42-0 CAPLUS
CN Methanone, [2-hydroxy-4-(4-morpholinyl)phenyl]-2-thiazolyl- (9CI) (CA INDEX NAME)



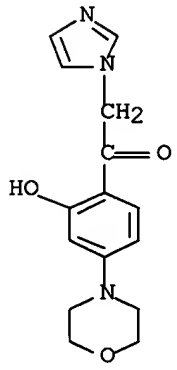
RN 404010-43-1 CAPLUS
CN Methanone, (3-chlorophenyl)[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



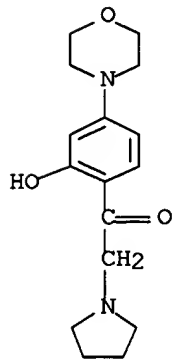
RN 404010-45-3 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-(4-morpholinyl)- (9CI) (CA INDEX NAME)



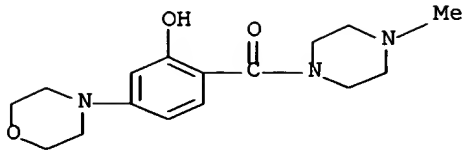
RN 404010-46-4 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



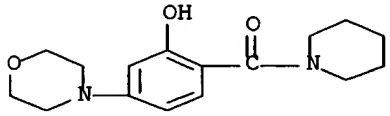
RN 404010-47-5 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)



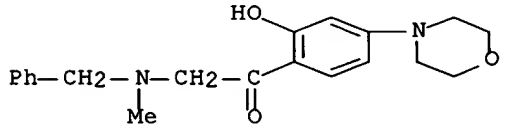
RN 404010-49-7 CAPLUS
CN Piperazine, 1-[2-hydroxy-4-(4-morpholinyl)benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



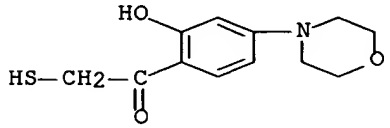
RN 404010-50-0 CAPLUS
CN Piperidine, 1-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



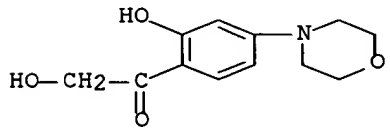
RN 404010-51-1 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-[methyl(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



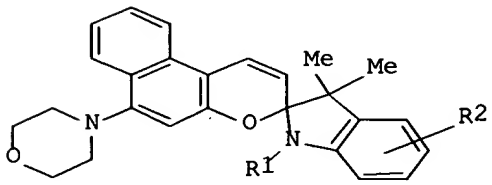
RN 404010-53-3 CAPLUS
CN Ethanone, 1-[2-hydroxy-4-(4-morpholinyl)phenyl]-2-mercapto- (9CI) (CA INDEX NAME)



RN 404011-13-8 CAPLUS
CN Ethanone, 2-hydroxy-1-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:764197 CAPLUS Full-text
DN 134:71510
TI Protolysis of spironaphtho(aza)pyranoindoles
AU Gabbutt, Christopher D.; Hepworth, John D.; Heron, B. Mark; Partington, Steven. M.
CS Department of Chemistry, The University of Hull, Hull, HU6 7RX, UK
SO Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (2000), 345, 323-328
CODEN: MCLCE9; ISSN: 1058-725X
PB Gordon & Breach Science Publishers
DT Journal
LA English
OS CASREACT 134:71510
GI

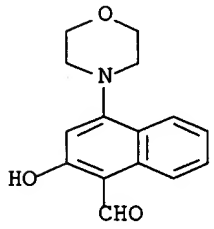


I

AB Some novel amino-substituted spiroindolinonaphthopyrans I (R1 = Me, CH2CHMe2, CH2CMe3, R2 = H; R1 = CH2CHMe2, R2 = 5-NHAc; R1 = Bu, R2 = 4,5-benzo) have been synthesized. While these compds. exhibit no observable photochromic properties at ambient temperature, protonation results in ring opening to give stable, intensely colored dyes. Recyclization and decoloration result on basification.

IT **227295-55-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction with Fischer bases)

RN 227295-55-8 CAPLUS
CN 1-Naphthalenecarboxaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

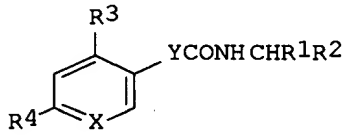


RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

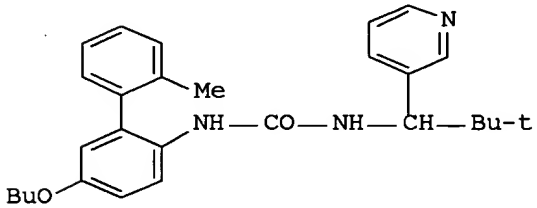
L10 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:62598 CAPLUS Full-text
DN 132:107708
TI Preparation of alkyl arylureas and arylacetamides with cholesterol acyl transferase inhibition effects
IN Yagisawa, Hiroaki; Naito, Satoru; Takamura, Minoru; Koga, Sadaichiro
PA Sankyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 67 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000026294	A2	20000125	JP 1999-124103	19990430
PRAI JP 1998-124386	A	19980507		

OS MARPAT 132:107708
GI



I

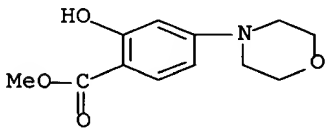


II

AB Title compds. [I; X = CH, N; Y = methylene and imino; R1 = H, C1-C8alkyl; R2 = 6 member heterocyclic; R3 = C6-C10 aryl; R4 = H, halogen, C1-C8 alkyl, C1-C8 alkoxy, C1-C8 alkylthio, C1-C10 alkylamino; 3-6 member cyclicamino], pharmaceutical acceptable salts are prepared and have cholesterol acyl transferase inhibitory effects which offer as remedy agents or the preventive agents of various diseases which originate in the ACAT inhibitory effect. Thus, the title compound II was prepared

IT **207850-94-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of alkyl arylureas and arylacetamides with cholesterol acyl transferase inhibition effects)

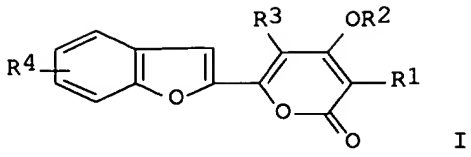
RN 207850-94-0 CAPLUS
CN Benzoic acid, 2-hydroxy-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)



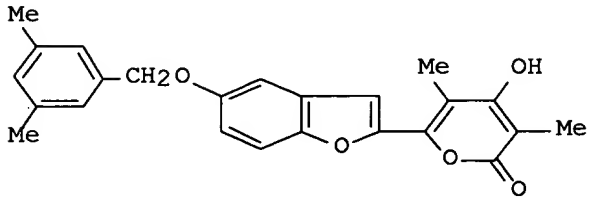
L10 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:595169 CAPLUS Full-text
DN 131:228641
TI Preparation of benzofurylpyrone derivatives and effects on lipid metabolism
IN Naniwa, Yoshimitsu; Imai, Hiroshi; Ida, Tomohide; Muratani, Emiko; Kitai, Kazuo; Sugimoto, Yoshinori; Kosugi, Tomomi; Takeuchi, Akiko; Watanabe, Kunihito; Tomiyama, Takami; Takeuchi, Tomio; Hamada, Masa
PA Teijin Limited, Japan; Microbial Chemistry Research Foundation
SO PCT Int. Appl., 176 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9946262	A1	19990916	WO 1999-JP1225	19990312
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2323456	AA	19990916	CA 1999-2323456	19990312
	AU 9932773	A1	19990927	AU 1999-32773	19990312
	AU 756965	B2	20030130		
	BR 9908706	A	20001121	BR 1999-8706	19990312
	EP 1063235	A1	20001227	EP 1999-939191	19990312
	EP 1063235	B1	20040512		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	TR 200002642	T2	20010122	TR 2000-200002642	19990312
	EE 200000504	A	20020215	EE 2000-504	19990312
	NZ 506802	A	20021126	NZ 1999-506802	19990312
	RU 2199536	C2	20030227	RU 2000-125690	19990312
	AT 266659	E	20040515	AT 1999-939191	19990312
	NO 2000004517	A	20000911	NO 2000-4517	20000911
	US 6589984	B1	20030708	US 2000-646005	20000911
	HR 2000000600	A1	20010630	HR 2000-600	20000912
	BG 104761	A	20010831	BG 2000-104761	20000912
	US 2003186976	A1	20031002	US 2003-435746	20030512
PRAI	JP 1998-61356	A	19980312		
	WO 1999-JP1225	W	19990312		
	US 2000-646005	A3	20000911		

OS MARPAT 131:228641
GI



I



II

AB Title compds. [I; wherein R1 represents hydrogen or C1-5 alkyl; R2 represents hydrogen, -CO-R5 or SO2R6; R3 represents hydrogen, C1-5 alkyl, etc.; and R4 is a substituent of a definite structure attached to the 4-, 5-, 6- or 7-position of the benzofuran ring] and salts thereof are prepared and tested as remedies for hyperglyceridemia, lipid metabolism improving agents, preventives/remedies for arteriosclerosis, etc. Thus, the title compound II was prepared

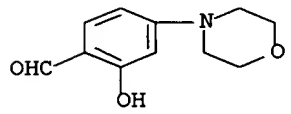
IT **70362-07-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzofurylpyrones and effects on lipid metabolism)

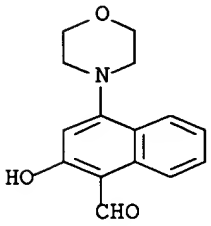
RN 70362-07-1 CAPLUS

CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:296207 CAPLUS Full-text
DN 131:46011
TI An NMR investigation of the merocyanine dyes generated by protolysis of some novel spironaphthopyranoindoles
AU Gabbutt, Christopher D.; Hepworth, John D.; Heron, B. Mark
CS Department of Chemistry, The University of Hull, Hull, HU6 7RX, UK
SO Dyes and Pigments (1999), 42(1), 35-43
CODEN: DYPIDX; ISSN: 0143-7208
PB Elsevier Science Ltd.
DT Journal
LA English
AB Two novel amino-substituted spiroindolinonaphtho[2,1-b]pyrans have been synthesized. While these compds. exhibit no observable photochromic properties at ambient temperature, protonation gives stable, intensely colored dyes. 1H NMR spectroscopy has been used to establish the configuration of these dyes.
IT **227295-55-8P**, 2-Hydroxy-4-morpholino-1-naphthalenecarboxaldehyde
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation and protolysis of spironaphthopyranoindoles for merocyanine dye generation)
RN 227295-55-8 CAPLUS
CN 1-Naphthalenecarboxaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)

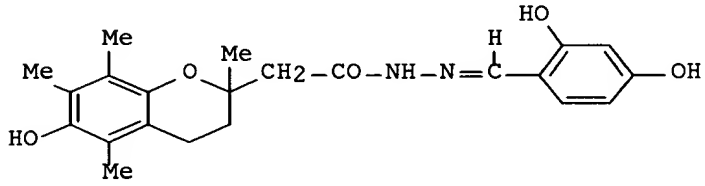


RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:253739 CAPLUS Full-text
DN 130:325088
TI Preparation of acylhydrazone derivatives as Maillard reaction inhibitors and active oxygen scavengers
IN Inoue, Hitoshi; Horigome, Masato; Kinoshita, Nobuhiro; Shibayama, Toshie
PA Nisshin Flour Milling Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 80 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11106371	A2	19990420	JP 1998-177222	19980624
PRAI JP 1997-179754	A	19970704		

OS MARPAT 130:325088
GI

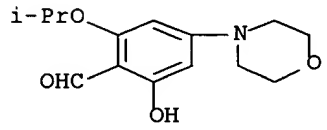


I

AB The title compds. XWY [X = benzene ring, chroman ring, etc.; Y = (un)substituted Ph, etc.; W = CONHN:CH, etc.] are prepared The title compound I in vitro showed IC50 of 4.2 μM against the Maillard reaction.

IT **223723-57-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of acylhydrazone derivs. as Maillard reaction inhibitors and active oxygen scavengers)

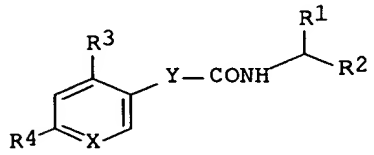
RN 223723-57-7 CAPLUS
CN Benzaldehyde, 2-hydroxy-6-(1-methylethoxy)-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



L10 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:341545 CAPLUS Full-text
DN 129:27897
TI Preparation of arylureas or arylmethylcarbamoyl derivatives as acyl-CoA-cholesterol acyltransferase inhibitors
IN Yanagisawa, Hiroaki; Naito, Satoru; Takamura, Makoto; Koga, Teiichiro
PA Sankyo Co., Ltd., Japan
SO PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9821185	A1	19980522	WO 1997-JP4053	19971107
	W: AU, CA, CN, CZ, HU, ID, IL, KR, MX, NO, NZ, RU, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9748850	A1	19980603	AU 1997-48850	19971107
	JP 10182608	A2	19980707	JP 1997-305109	19971107
PRAI	JP 1996-296870	A	19961108		
	WO 1997-JP4053	W	19971107		

OS MARPAT 129:27897
GI

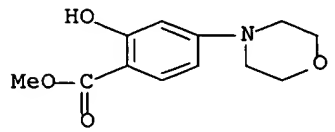


I

AB The title compds. [I; X = CH or N; Y = CH2 or imino; R1 = H or alkyl; R2 = N-containing heteroaryl; R3 = (un)substituted aryl; R4 = H, halo, alkyl, alkoxy, alkylthio, aryl, aryloxy, arylthio, aralkyl, aralkyloxy, aralkylthio, dialkylamino, cyclic amino, etc.] or pharmacol. acceptable salts thereof are prepared I, possessing acyl-CoA-cholesterol acyltransferase (ACAT) inhibitory activity, are useful for prevention and treatment of hyperlipemia, atherosclerosis, and related diseases. Thus, 2-(2-methylphenyl)-4-phenylbenzoic acid (preparation given) was reacted with 3-(1-amino-2,2-dimethylpropyl)pyridine in the presence of diphenylphosphorylazide and Et3N to give 64% I (Y = NH, R1 = tert-Bu, R2 = 3-pyridyl, R3 = o-MeC6H4, R4 = Ph, X = CH) (II), which showed IC50 of 104 ng/mL against ACAT. A hard capsule formulation containing II was also prepared

IT **207850-94-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of arylureas or arylmethylcarbamoyl derivs. as acyl-CoA-cholesterol acyltransferase inhibitors)

RN 207850-94-0 CAPLUS
CN Benzoic acid, 2-hydroxy-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)

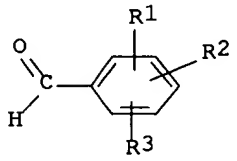


RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1996:150310 CAPLUS Full-text
DN 124:206893
TI Use of benzaldehydes to mark hydrocarbons and method for their determination
IN Kraeh, Claudia; Schloesser, Ulrike; Beck, Karin Heidrun; Mayer, Udo
PA BASF A.-G., Germany
SO Ger. Offen., 13 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4424712	A1	19960118	DE 1994-4424712	19940713
	CA 2195019	AA	19960201	CA 1995-2195019	19950703
	WO 9602613	A1	19960201	WO 1995-EP2558	19950703
	W: AU, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RU, SG, SK, UA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9529263	A1	19960216	AU 1995-29263	19950703
	AU 686838	B2	19980212		
	EP 770119	A1	19970502	EP 1995-924960	19950703
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1155898	A	19970730	CN 1995-194718	19950703
	HU 76687	A2	19971028	HU 1997-62	19950703
	JP 10502693	T2	19980310	JP 1995-504633	19950703
	BR 9508401	A	19980519	BR 1995-8401	19950703
	NO 9700126	A	19970310	NO 1997-126	19970110
	FI 9700108	A	19970312	FI 1997-108	19970110
PRAI	DE 1994-4424712	A	19940713		
	WO 1995-EP2558	W	19950703		

OS MARPAT 124:206893
GI

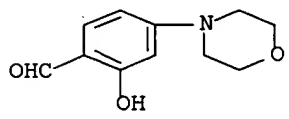


I

AB Benzaldehydes of formula I (where R1, R2, and R3 are H, hydroxide, C1-15 alkyl, C1-15 alkoxy, cyano, nitro, or a group of formula NR4R5 or COOR6, R4 is a substituted C1-15 alkyl or a rest of formula L-NX1-X2, where L is C2-8 alkylene and X1 and X2 independently C1-8 alkyl or forms with them a heterocyclic rest, and R6 is hydrogen, optionally substituted C1-15 alkyl or L-NX1-X2) are suitable for use as markers for hydrocarbons. The compds. are easily determined

IT **70362-07-1**
RL: ANT (Analyte); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)
(marker; use of benzaldehydes to mark hydrocarbons and method for their determination)

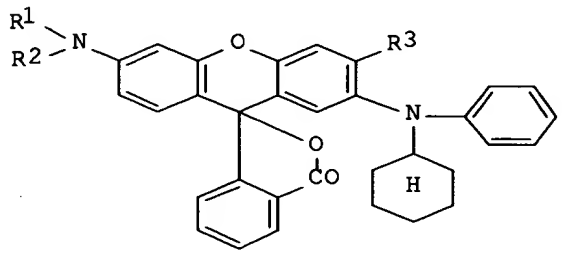
RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



L10 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:545415 CAPLUS Full-text
DN 121:145415
TI Recording material using fluoran compounds
IN Ootsuji, Atsuo; Nakatsuka, Masakatsu; Hasegawa, Kyoharu; Yoshikawa, Kazuyoshi
PA Mitsui Toatsu Chemicals, Japan
SO Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05278325	A2	19931026	JP 1992-76570	19920331
	JP 3048274	B2	20000605		
PRAI	JP 1992-76570		19920331		

GI

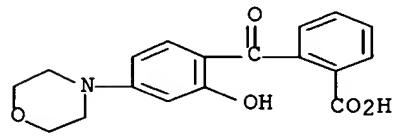


I

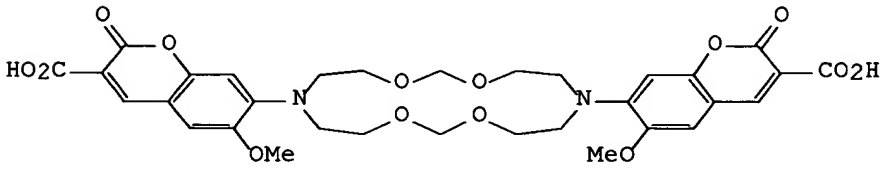
AB In the title recording material utilizing an electron donating color former and an electron accepting compound to give color by contacting them, the color former employs ≥1 fluoran compound I (R1, R2 = C1-12 alkyl, C3-12 alkoxy, C5-12 cycloalkyl; R and R2 may joint to form a 5-6-membered heterocycle with N; R3 = H, C1-4 alkyl). The recording material shows both good material and image storage stability.

IT **55165-07-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, electron donating color former from, for recording material)

RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



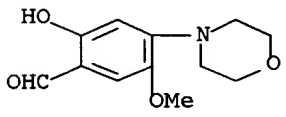
L10 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:265044 CAPLUS Full-text
DN 120:265044
TI Synthesis and spectral properties of new fluorescent probes for potassium
AU Crossley, Roger; Goolamali, Zia; Gosper, Jeffrey J.; Sammes, Peter G.
CS Dep. Chem., Brunel Univ., Uxbridge/Middlesex, UB8 3PH, UK
SO Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1994), (3), 513-20
CODEN: JCPKBH; ISSN: 0300-9580
DT Journal
LA English
GI



I

AB Studies on the preparation and properties of two new, selective fluorescent probes CD18, (I, R = CO2H) and C18 (II, R = H) for potassium are described. The probes incorporate the 1,10-diaza-18-crown-6 chelating group for the ion and the coumarin group as the fluorophore. The probes are compared with the known reagent PBFI. CD18 shows considerably greater selectivity for potassium over sodium than PBFI.

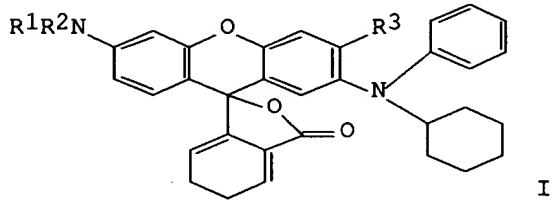
IT **154519-08-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation of, with di-Me malonate)
RN 154519-08-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-5-methoxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



L10 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:149009 CAPLUS Full-text
DN 120:149009
TI Fluoran compound for recording material
IN Ootsuji, Atsuo; Nakatsuka, Masakatsu
PA Mitsui Toatsu Chemicals, Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05247051	A2	19930924	JP 1992-324346	19921203
	JP 3137473	B2	20010219		
PRAI	JP 1991-327411	A1	19911211		

OS MARPAT 120:149009
GI

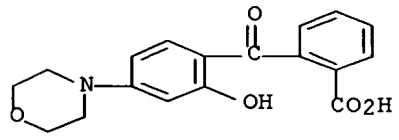


I

AB The fluoran compound consists of I (R1-2 = C1-12 alkyl, C3-12 alkoxyalkyl, C5-12 cycloalkyl, NR1R2 may form 5- or 6-membered heterocyclic group; R3 = C1-4 alkyl). The fluoran compound is useful for thermal or pressure-sensitive recording. The fluoran compound shows good red- or green-coloring.

IT **55165-07-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with cyclohexyldiphenylamine derivs. in preparation of fluoran compds.)

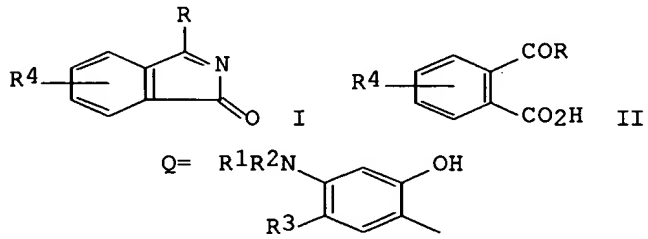
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1990:55599 CAPLUS Full-text
DN 112:55599
TI Preparation and hydrolysis of 3-(4-amino-2-hydroxyphenyl)-1-oxo-isoindolenines
IN Kranz, Joachim; Landmann, Bernd; Mayer, Udo
PA BASF A.-G., Fed. Rep. Ger.
SO Ger. Offen., 7 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3800577	A1	19890720	DE 1988-3800577	19880112
	EP 327792	A2	19890816	EP 1989-100028	19890103
	EP 327792	A3	19891004		
	EP 327792	B1	19931222		
	R: CH, DE, FR, GB, IT, LI				
	US 4904798	A	19900227	US 1989-295462	19890110
	JP 01213261	A2	19890828	JP 1989-2964	19890111
PRAI	DE 1988-3800577	A	19880112		

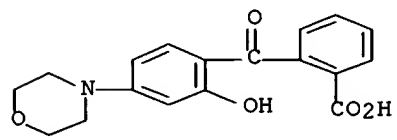
OS CASREACT 112:55599; MARPAT 112:55599
GI



AB The title compds. [I; R = Q; R1 = H, (un)substituted C1-12 alkyl, C5-8 cycloalkyl, Ph; R2 = H, (un)substituted C1-6 alkyl; NR1R2 = morpholino, pyrrolidino, piperdino; R3 = H, Me; R4 = H, Cl, C1-4 alkyl, NO2] were prepared by condensation of 3-aminophenols QH with 3-amino-1-oxo- isoindolenines I (R = NH2, R4 as above) in the presence of acids, and hydrolized to II (R and R4 as defined). Thus, 4,3-Me(EtNH)C6H3OH was heated 1 h at 120° with I.HCl (R = NH2, R4 = H) in DMF to give I (R = Q, R1 = Et, R2 = R4 = H, R3 = Me) which was refluxed 5 h in 20% aqueous KOH to give II (R, R1, R2, R3, R4 unchanged).

IT **55165-07-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

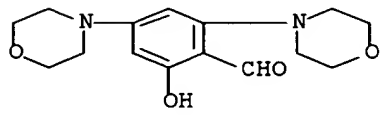
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1988:494747 CAPLUS Full-text
DN 109:94747
TI Dibasic spirodipyran color formers
IN Eichinger, Karl; Hartmann, Friedrich
PA Koreska Licensing G.m.b.H., Austria
SO Austrian, 8 pp.
CODEN: AUXXAK
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 385272	B	19880310	AT 1986-865	19860402
	AT 8600865	A	19870815		
PRAI	AT 1986-865		19860402		

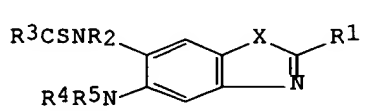
OS MARPAT 109:94747
GI For diagram(s), see printed CA Issue.
AB The title compds. I (A is an aromatic system; R1, R2 = H, aryl, alkyl, or jointly form an aliphatic carbocyclic ring; R3, R4 = alkyl or NR3R4 = pyrrolidino, piperidino, morpholino, thiomorpholino, or N'-substituted piperazinyl), useful as color formers in carbonless copying paper and heat- and pressure-sensitive recording materials, are prepared by the reaction of pyrylium salts with basically substituted salicylaldehydes in lower aliphatic alcs. or ketones at the solvent boiling temperature 3,5-Dimorpholinophenol was subjected to the Vilsmeier reaction with POCl3 and DMF, the obtained dimorpholinosalicylaldehyde reacted with 2,3-dimethylbenzo[b]pyrylium trichlorozincate in MeOH for 3 h under reflux, forming II, a bright yellow crystal powder, which developed a blue-violet color when contacted with acidic materials.
IT **115948-77-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with dimethylbenzopyrylium trichlorozincate)
RN 115948-77-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4,6-di-4-morpholinyl- (9CI) (CA INDEX NAME)



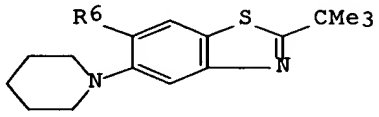
L10 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:18526 CAPLUS Full-text
DN 106:18526
TI Benzazoles
IN Rao, Vittal Ramachandra
PA Ciba-Geigy A.-G., Switz.
SO Eur. Pat. Appl., 40 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 175650	A2	19860326	EP 1985-810418	19850913
	EP 175650	A3	19870204		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	IN 159785	A	19870606	IN 1984-BO211	19840727
	US 4680301	A	19870714	US 1985-774776	19850911
	FI 8503535	A	19860320	FI 1985-3535	19850916
	DK 8504226	A	19860320	DK 1985-4226	19850918
	JP 61078775	A2	19860422	JP 1985-204568	19850918
	DD 236929	A5	19860625	DD 1985-280750	19850918
	ZA 8507144	A	19860625	ZA 1985-7144	19850918
	HU 38919	A2	19860728	HU 1985-3519	19850918
	HU 192726	B	19870629		
	ES 547090	A1	19871016	ES 1985-547090	19850918
	ES 557069	A1	19871216	ES 1986-557069	19860916
PRAI	GB 1984-23697	A	19840919		

OS MARPAT 106:18526
GI



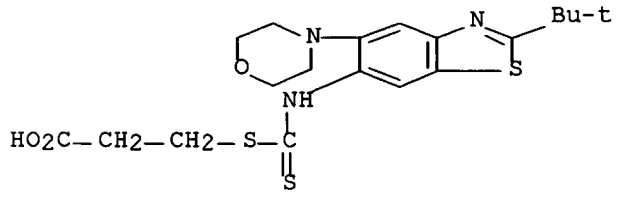
I



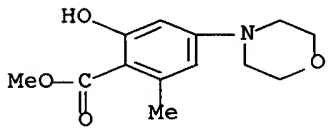
II

AB The title compds. [I; R1 = (un)substituted alkyl, alkenyl, cycloalkyl; R2 = H; R3 = (un)substituted alkylthio, alkenylthio; R2R3 = bond; R4, R5 = H, alkyl, cycloalkyl; R4R5N = (un)substituted heterocyclyl] were prepared as filaricides. Thus, 2,5-Cl2C6H3NH2 was sequentially acylated with Me3CCOCl, nitrated, and treated with P2S5 to give 2,5,4- Cl2(O2N)C6H2NHCSCMe3. This was cyclized and aminated with piperidine to give benzothiazole II (R6 = NO2). The latter was reduced and thiocarbamoylated with HNCS to give II (R6 = NHCSNH2). This was deaminated to give II (R6 = isothiocyanato). In rats, I were effective filaricides with 2-5 doses at 5-25 mg/kg orally.

IT **104079-79-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as filaricide)
RN 104079-79-0 CAPLUS
CN Propanoic acid, 3-[[[[2-(1,1-dimethylethyl)-5-(4-morpholinyl)-6-benzothiazolyl]amino]thioxomethyl]thio]- (9CI) (CA INDEX NAME)



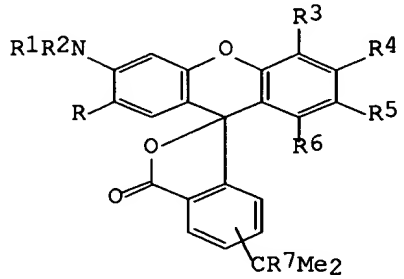
L10 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:88194 CAPLUS Full-text
DN 104:88194
TI Chemistry of 4-trimethylsilyl-3-dialkylaminocrotonate esters and the cycloaromatization reactions with enamines
AU Kang, G. J.; Chan, T. H.
CS Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can.
SO Canadian Journal of Chemistry (1985), 63(11), 3102-10
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
OS CASREACT 104:88194
AB Me 4-trimethylsilyl-3-dialkylaminocrotonate is synthesized by the silylation of Me 3-dialkylaminocrotonate. It reacts with carbonyl electrophiles at its γ-position. The unusual regiochem. of this reaction is studied and rationalized. It reacts with enamines derived from acyclic ketones to give aromatic compds. in a 3C + 3C combination and with enamines derived from cycloketones of 5- to 8-membered rings to give aromatic compds. in a 4C + 2C combination. A mechanism for this cycloaromatization reaction is proposed.
IT **87565-78-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decarboxylation of)
RN 87565-78-4 CAPLUS
CN Benzoic acid, 2-hydroxy-6-methyl-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)



L10 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1985:525013 CAPLUS Full-text
DN 103:125013
TI Fluoran color formers
IN Mayer, Udo; Oberlinner, Andreas
PA BASF A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 27 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3337387	A1	19850425	DE 1983-3337387	19831014
	EP 138177	A2	19850424	EP 1984-112011	19841006
	EP 138177	A3	19850605		
	EP 138177	B1	19880107		
	R: CH, DE, FR, GB, IT, LI				
	JP 60101152	A2	19850605	JP 1984-212744	19841012
	US 4603202	A	19860729	US 1984-660128	19841012
PRAI	DE 1983-3337387	A	19831014		

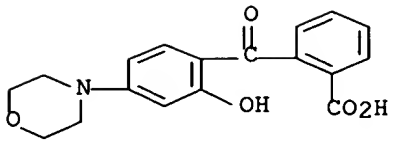
OS MARPAT 103:125013
GI



I

AB Fluoran color formers with good solubility in microencapsulation solvents and reduced migration in support materials are represented by general structure I, where R = H or Me; R1 = H or (un)substituted alkyl; R2 = H, (un)substituted alkyl, cycloalkyl, or (un)substituted Ph, or R1R2N = 5- or 6-membered heterocycle; R3 and R4 = H, alkyl, alkoxy, or halogen; R5 = H, halogen, alkyl, etc.; R6 = H, alkyl, or halogen; and R7 = C1-5 alkyl. I are useful in heat- or pressure-sensitive recording systems and produce yellow, orange, red, blue, olive, or black colors when in contact with electron acceptors. Thus, treatment of 4-tert-butyl-2-(2-hydroxy-5- methylbenzoyl)benzoic acid [98233-18-2] in CHCl3 with POCl3 at room temperature and then with 3-(ethylamino)-4-methylphenol [120-37-6] at reflux gave 5'(6')-tert-butyl-3-(ethylamino)-2,7-dimethylfluoran [98181-33-0], which produced deep orange copies when microencapsulated and used in copying paper. Numerous other I were similarly prepared

IT **98181-30-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation reaction of, with naphthol)
RN 98181-30-7 CAPLUS
CN Benzoic acid, 4(or 5)-(1,1-dimethylethyl)-2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)

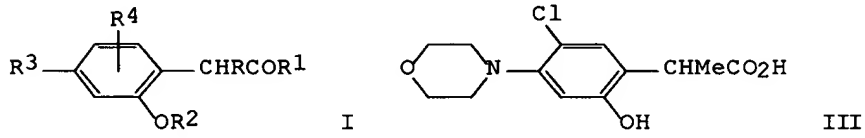


D1—Bu-t

L10 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:575385 CAPLUS Full-text
DN 99:175385
TI Aminophenol acetic acid
IN Wenk, Paul; Breitenstein, Werner; Baumann, Marcus
PA Ciba-Geigy A.-G. , Switz.
SO Brit. UK Pat. Appl., 45 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2109373	A1	19830602	GB 1982-30352	19821025
	GB 2109373	B2	19860115		
	EP 82109	A2	19830622	EP 1982-810440	19821022
	EP 82109	A3	19850417		
	R: AT, BE, CH, DE, FR, IT, LI, LU, NL, SE				
	FI 8203641	A	19830429	FI 1982-3641	19821025
	ES 516843	A1	19850516	ES 1982-516843	19821026
	DK 8204760	A	19830429	DK 1982-4760	19821027
	NO 8203586	A	19830429	NO 1982-3586	19821027
	AU 8289824	A1	19830505	AU 1982-89824	19821027
	ZA 8207845	A	19830629	ZA 1982-7845	19821027
	HU 30695	O	19840328	HU 1982-3449	19821027
	JP 58150544	A2	19830907	JP 1982-191738	19821028
	DD 208798	A5	19840411	DD 1982-244347	19821028
	ES 529377	A1	19851101	ES 1984-529377	19840201
	ES 529378	A1	19851101	ES 1984-529378	19840201
	ES 529379	A1	19851101	ES 1984-529379	19840201
	ES 529380	A1	19851201	ES 1984-529380	19840201
	ES 529376	A1	19860601	ES 1984-529376	19840201
	ES 537285	A1	19850816	ES 1984-537285	19841031
PRAI	CH 1981-6883	A	19811028		

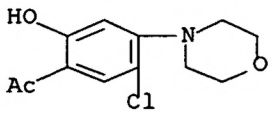
OS MARPAT 99:175385
GI



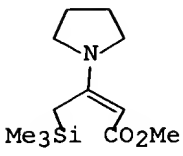
AB Phenylacetic acids I (R = H1, aliphatic; R1 = OH, esterified OH, amino; R2 = H, acyl; R3 = amino; R4 = H, substituent) were prepared as inflammation inhibitors, analgesics,and sunscreens (no data). Thus, treating imidazo[1,2-a]pyridin-2(3H)-one-HCl with maleic acid gave its 3-(1,2-diacarboxyethyl) derivative which was treated with MeCOCH:CH2 and hydrolyzed to give 4-methyl-3-(3-oxobutyl)maleic anhydride (II). II was treated with morpholinium benzoate to give 3-methyl-6-morpholinobenzofuran- 2(3H)-one which was converted to its 5-chloro derivative and hydrolyzed to III.

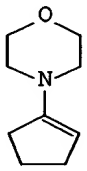
IT **87203-04-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)

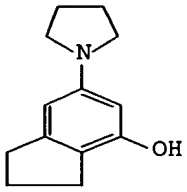
RN 87203-04-1 CAPLUS
CN Ethanone, 1-[5-chloro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)


HO
Ac
Cl
N
O

L10 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:575286 CAPLUS Full-text
DN 99:175286
TI Cycloaromatization reaction of enamines
AU Chan, T. H.; Kang, G. J.
CS Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can.
SO Tetrahedron Letters (1983), 24(30), 3051-4
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
OS CASREACT 99:175286
GI



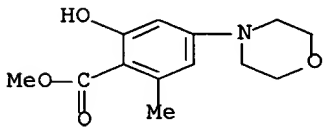
I


II


III

AB Condensation of enamines with 4-(trimethylsilyl)-3-(dialkylamino)crotonate esters under acid catalyzed conditions gives aromatic compds. according to a 3C+3C or a 4C+2C manner depending on the structure of the enamine. Thus, the aminocrotonate I reacted with the enamine II to give the phenol derivative III in 64% yield.

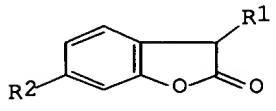
IT **87565-78-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 87565-78-4 CAPLUS
CN Benzoic acid, 2-hydroxy-6-methyl-4-(4-morpholinyl)-, methyl ester (9CI) (CA INDEX NAME)



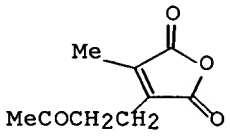
L10 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:539751 CAPLUS Full-text
DN 99:139751
TI Furans
IN Wenk, Paul; Breitenstein, Werner; Baumann, Marcus
PA Ciba-Geigy A.-G. , Switz.
SO Eur. Pat. Appl., 103 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 78241	A2	19830504	EP 1982-810439	19821022
	EP 78241	A3	19840328		
	R: AT, BE, CH, DE, FR, IT, LI, LU, NL, SE				
	US 4426380	A	19840117	US 1982-435595	19821021
	FI 8203640	A	19830429	FI 1982-3640	19821025
	GB 2110210	A1	19830615	GB 1982-30351	19821025
	GB 2110210	B2	19850703		
	ES 516842	A1	19840116	ES 1982-516842	19821026
	CA 1199635	A1	19860121	CA 1982-414197	19821026
	DK 8204759	A	19830429	DK 1982-4759	19821027
	NO 8203585	A	19830429	NO 1982-3585	19821027
	AU 8289823	A1	19830505	AU 1982-89823	19821027
	ZA 8207844	A	19830629	ZA 1982-7844	19821027
	DD 204699	A5	19831207	DD 1982-244314	19821027
	HU 29609	O	19840228	HU 1982-3447	19821027
	JP 58126882	A2	19830728	JP 1982-191737	19821028
	US 4451462	A	19840529	US 1983-542334	19831017
	ES 526890	A1	19851001	ES 1983-526890	19831028
	ES 526892	A1	19851001	ES 1983-526892	19831028
	ES 526891	A1	19860201	ES 1983-526891	19831028
PRAI	CH 1981-6882	A	19811028		
	US 1982-435595	A1	19821021		

OS MARPAT 99:139751
GI



I



II

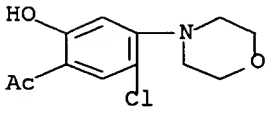
AB Benzofuranones I (R1 = H, aliphatic group; R2 = amino disubstituted with hydrocarbondiyl; benzo ring may be addnl. substituted) and their salts and(or) isomers, useful as inflammation inhibitors, analgesics, and sunscreens for skin (no data), were prepared Imidazo[1,2-a]pyridin-2(3H)- one hydrochloride in aqueous NaOH added to maleic acid to give 3-(1,2-dicarboxyethyl)imidazo[1,2-a]pyridin-2-(3H)-one. The HCl salt of this added to MeCOCH:CH2 and the product was decarboxylated and hydrolyzed to give maleic anhydride II. This reacted with morpholinium benzoate in refluxing C6H6 in 48 h with H2O separation to give I (R1 = Me, R2 = morpholino).

IT **87203-04-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and etherification of)

RN 87203-04-1 CAPLUS

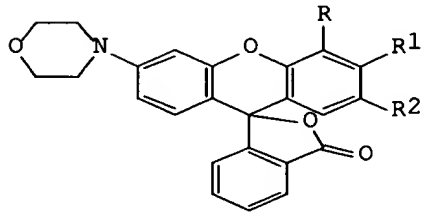
CN Ethanone, 1-[5-chloro-2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:73839 CAPLUS Full-text
DN 98:73839
TI Chromogenic fluoran compounds
IN Dixon, Leonard Fox
PA Holliday Dyes and Chemicals Ltd., UK
SO Brit. UK Pat. Appl., 6 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2097013	A	19821027	GB 1982-10955	19820415
PRAI GB 1981-12191	A	19810416		

GI

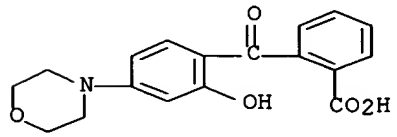


I

AB Chromogenic fluorans (I) for pressure-sensitive record materials are prepared, where R = H or lower alkyl; R1 and R2 independently represent H, alkyl, cycloalkyl, aralkyl, aryl, OH, alkoxy, cycloalkoxy, aralkoxy, or aryloxy; R1 or R2 can be an optionally substituted amino group; and RR1 or R1R2 represents a fused ring. In contact with acidic materials I give red, orange, green, purple, and black colors. Thus, reaction of 2'-hydroxy-4'-morpholinobenzophenone-2-carboxylic acid [**55165-07-6**] with 4-(acetylamino)phenol [103-90-2] in H2SO4 at 50° followed by deacetylation gave almost colorless crystalline I(R = R1 = H, R2 = NH2)(II) [84428-98-8] (after recrystn. from toluene). A toluene solution of II gave a purple black color to acid clay-coated paper. Ten other I were similarly prepared

IT **55165-07-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation reaction of, with aminophenols)

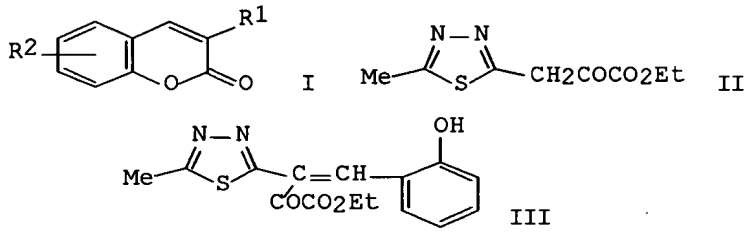
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:587261 CAPLUS Full-text
DN 95:187261
TI Coumarin compounds
IN Hagen, Helmut; Kohler, Rolf Dieter
PA BASF A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 17 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2950291	A1	19810619	DE 1979-2950291	19791214
EP 30703	A1	19810624	EP 1980-107746	19801209
EP 30703	B1	19840321		
R: BE, CH, DE, FR, GB, NL				
PRAI DE 1979-2950291	A	19791214		

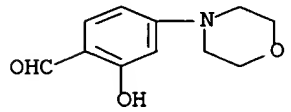
OS MARPAT 95:187261
GI



AB Coumarins I(R1 = heterocyclyl, R2 = H, aliphatic, cyclo-, araliph., aromatic, OR3, NR32, NO2, halo, R3 independently = aliphatic, cyclo-8 araliph., aromatic, NR32 = heterocyclyl) were prepared by a simpler and more economical method than previously and in better yield and purity. I was fluorescent dyes and optical brighteners (no data) and intermediates for dyes, pesticides, and pharmaceuticals. Stirring a mixture of pyruvate II, 2-HOC6H4CHO, and ZnCl2 2 h at 100° gave 60% condensation product III which was cyclized with NaOMe in Me glycol in 1 h at 130° to give 85% coumarin I (R1 = 5-methyl-1,3,4-thiadiazol-2-yl, R2 = H).

IT **70362-07-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with thiadiazolylpyruvate ester enolate)

RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



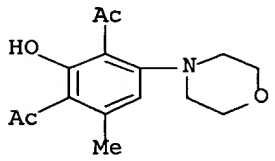
L10 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:568872 CAPLUS Full-text
DN 95:168872
TI Benzene derivatives from 4-pyrones: the reaction of 3,5-diacetyl- and 3,5-bisethoxycarbonyl-4-pyrones with secondary amines
AU Eiden, Fritz; Teupe, Ernst Guenther; Leister, Hans Peter
CS Inst. Pharm. Lebensmittelchem., Univ. Muenchen, Munich, 8000/2, Fed. Rep. Ger.
SO Archiv der Pharmazie (Weinheim, Germany) (1981), 314(4), 347-55
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA German
OS CASREACT 95:168872
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

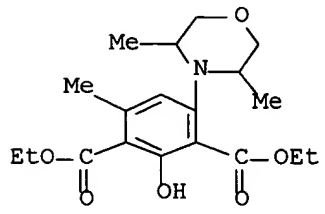
AB The reactions of title pyrones I (R = EtO, Me) with cyclic R12NH (e.g., piperidine, morpholine) gave phenols II and, in the case of I (R = Me) with piperazine, bisphenol III. II (R = Me, NR12 = piperidino) and III reacted with Me2NCH(OCHMe2)2 to give IV and V. The reaction of IV with hydrazines gave pyrazoles VI (R2 = Ph, Me). Hydrolysis of II (R = Me, NR12 = 4-cyano-4-phenylpiperidino) gave VII (R3 = CONH2, CO2Et).

IT **77600-95-4P 79512-30-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 77600-95-4 CAPLUS
CN Ethanone, 1,1'-[2-hydroxy-4-methyl-6-(4-morpholinyl)-1,3-phenylene]bis- (9CI) (CA INDEX NAME)



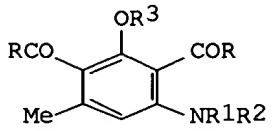
RN 79512-30-4 CAPLUS
CN 1,3-Benzenedicarboxylic acid, 4-(3,5-dimethyl-4-morpholinyl)-2-hydroxy-6-methyl-, diethyl ester (9CI) (CA INDEX NAME)



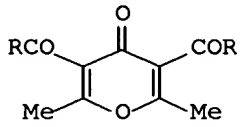
L10 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:191938 CAPLUS Full-text
DN 94:191938
TI 2-Hydroxy-4-methylbenzene compounds
IN Eiden, Fritz; Teupe, Ernst Guenther; Leister, Hans Peter; Mayer, Dieter
PA Thiemann, Dr., G.m.b.H. Chem.-Pharm. Fabrik, Fed. Rep. Ger.
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2922488	A1	19801211	DE 1979-2922488	19790601
PRAI DE 1979-2922488	A	19790601		

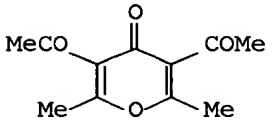
OS MARPAT 94:191938
GI



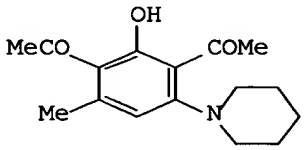
I



II



III

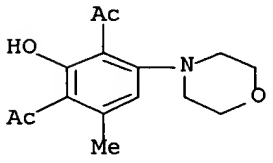


IV

AB I [R = Me or C1-4 alkoxy; R1 and R2 were C1-4 alkyl or (R1R2N =) heterocyclyl; R3 = H, Me, or Et] were prepared by reaction of II with secondary amines. Thus 2 g III and 950 mg piperidine were heated 1.5 h at 100° to give 84% IV.

IT **77600-95-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

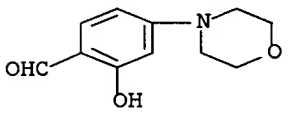
RN 77600-95-4 CAPLUS
CN Ethanone, 1,1'-[2-hydroxy-4-methyl-6-(4-morpholinyl)-1,3-phenylene]bis- (9CI) (CA INDEX NAME)



L10 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1980:595485 CAPLUS Full-text
DN 93:195485
TI Pressure-sensitive copying paper
IN Miyazawa, Yoshiei; Motohashi, Katsuichi; Harada, Etsuo; Kato, Hajime
PA Hodogaya Chemical Co., Ltd., Japan; Fuji Photo Film Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 55044830	A2	19800329	JP 1978-117983	19780927
PRAI JP 1978-117983	A	19780927		

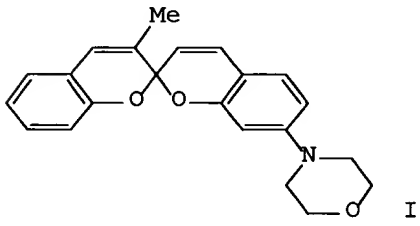
GI For diagram(s), see printed CA Issue.
AB Pressure-sensitive copying materials contain a 7-substituted spiropyran derivative I (R = H, lower alkyl, Ph; A = benzene or naphthalene ring; R1 = pyrrolidinyl, piperidino, morpholino; R may form 5- or 6-membered ring by bonding with the C atom at 3-position) as the dye precursor. Thus, II was microencapsulated by using a conventional method and the resultant microcapsule dispersion was coated on a paper support to give a pressure-sensitive sheet which gave high-optical-d. images having good light fastness when it is used with an acidic clay type color developer sheet.
IT **70362-07-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethylnaphthopyrylium chloride ferric chloride)
RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



L10 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1979:213274 CAPLUS Full-text
DN 90:213274
TI Leuco dyes for pressure-sensitive copying paper
IN Baumann, Hans; Oberlinner, Andreas
PA BASF A.-G., Fed. Rep. Ger.
SO Ger. Offen., 22 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2737207	A1	19790301	DE 1977-2737207	19770818
	US 4161589	A	19790717	US 1978-932015	19780808
	EP 900	A1	19790307	EP 1978-100629	19780809
	EP 900	B1	19810114		
	R: CH, DE, FR, GB				
	JP 54041880	A2	19790403	JP 1978-100125	19780818
PRAI	DE 1977-2737207	A	19770818		

GI

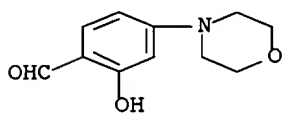


I

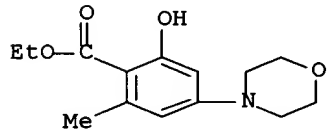
AB Spirodipyrans with a fused-on Ph or 2,1-naphthalene ring and N-morpholino (or N-isoindolinyl) as substituent, microencapsulated as practically colorless oily solution, and coated on paper yield red-violet to blue copies in contact with electron acceptors but are less liable to develop color in non-acid areas than precursors containing a -NEt2 group in place of the morpholine. Thus, refluxing 2,3-dimethylbenzopyrylium trichlorozincate 165 parts with 4-N-morpholinosalicylaldehyde 105 parts in MeOH 900 parts resulted in a crystalline dye which was decolorized by stirring in a mixture of 25% aqueous NH4OH 500 and PhMe 1000 parts. From the PhMe phase 3'-methyl-7-N-morpholino-2,2'-spirodi(2H-1-benzopyran) (I) 130 parts was recovered.

IT **70362-07-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethylbenzopyryliumtrichlorozincate and related compds.)

RN 70362-07-1 CAPLUS
CN Benzaldehyde, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



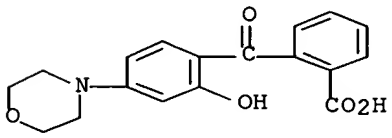
L10 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:22305 CAPLUS Full-text
DN 88:22305
TI Amide-acid chloride adducts. Part IX. The reaction of β-N,N-dialkylammocrotonates with phosphorus oxychloride
AU Harris, Roger L. N.; Huppatz, John L.; Phillips, John N.
CS Div. Plant Ind., CSIRO, Canberra City, Australia
SO Australian Journal of Chemistry (1977), 30(10), 2213-23
CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
AB β-(Dialkylamino)crotonates underwent autocondensation in excess phosphorus oxychloride at room temperature to give N,N-dialkylanthranilates in high yield. When stoichiometric amts. of phosphorus oxychloride were used in benzene at 80°, significant amts. of phenolic by-products were also formed, which, in the case of β-morpholinocrotonates, become the major products.
IT **65219-95-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 65219-95-6 CAPLUS
CN Benzoic acid, 2-hydroxy-6-methyl-4-(4-morpholinyl)-, ethyl ester (9CI) (CA INDEX NAME)



L10 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1976:91647 CAPLUS Full-text
DN 84:91647
TI Fluoran derivatives
IN Yahagi, Masakichi; Toyama, Takafumi; Izaki, Tetsuo; Suzuki, Teruo
PA Nisso Kako Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp. Division of Japan. Kokai 75 09,430.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50082127	A2	19750703	JP 1974-95363	19740820
	JP 55049086	B4	19801210		
PRAI	JP 1974-95363	A	19740820		

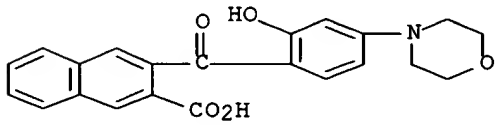
GI For diagram(s), see printed CA Issue.
AB Fluoran derivs. I (R = pyrrolidino, piperidino, or morpholino; R1-R4 include at least 1 amino substituent) are prepared by reaction of 2,4-HORC6H3COC6H4CO2H-2 (II) with an aminophenol or aminonaphthol. I are useful as color-formers in inks for pressure- or heat-sensitive copying paper. For example, 8 g II (R = piperidino) [55165-06-5] was treated with 5.4 g 4,2-HOMeC6H3NHPh [17654-13-6] in 62 g concentrated H2SO4 at 0-10° for 24 hr, poured into ice water and filtered to give 6.2 g I (R = piperidino, R1 = R4 = H, R2 = Me, R3 = NHPh) [55773-64-3] as pale brown crystals, which turn violet in contact with clay and green in contact with phenolic resins. Four addnl. I were similarly prepared Also, 9.7 g p-H2NC6H4OH [123-30-8] was added to 23 g II (R = pyrrolidino) [49742-68-9] in 90 g concentrated H2SO4 at 100-10° and the product [55772-74-2] was alkylated with PhCH2Cl [100-44-7] in xylene at 120-30° to give 5.0 g white I [R = pyrrolidino, R1 = R2 = R4 = H, R3 = N(CH2Ph)2] [55772-83-3], which turned green in contact with clay or phenolic resin. Similar alkylation gave 4 addnl. I.
IT **55165-07-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with piperidinophenol)
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:499215 CAPLUS Full-text
DN 83:99215
TI Fluoran compounds and recording material containing them
IN Hotta, Seiji; Ito, Yukiaki
PA Sumitomo Chemical Co., Ltd., Japan
SO Ger. Offen., 90 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2446313	A1	19750515	DE 1974-2446313	19740927
	JP 50064016	A2	19750530	JP 1973-112591	19731005
	JP 56046997	B4	19811106		
	US 4024157	A	19770517	US 1974-510916	19741001
	GB 1460210	A	19761231	GB 1974-42900	19741003
	FR 2246561	A1	19750502	FR 1974-33567	19741004
	CH 613403	A	19790928	CH 1974-13400	19741004
	US 4156682	A	19790529	US 1976-734668	19761021
PRAI	JP 1973-112591	A	19731005		
	US 1974-510916	A3	19741001		

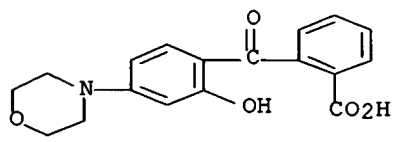
GI For diagram(s), see printed CA Issue.
AB Color formers [I, R = H, Br; R1 = Et, Me; R2 = Et, Ph, cyclohexyl, p-MeC6H4; (R1R2N) = morpholino, piperidino; R3 = H; (R3R4) = benzo; R4 = H, Me; R5 = H, Ph, PhCH2, Me, cyclohexyl, substituted Ph; R6 = H, Ph, PhCH2] were prepared and used in pressure-sensitive copying paper giving light-fast dark red to black shades in contact with an acid substrate. Thus, a mixture of 4-HOC6H4NH2 [123-30-8], 2-[4-(diethylamino)-2- hydroxybenzoyl]-3-naphthalenecarboxylic acid [54117-20-3] in H2SO4 was condensed at 20-30° for 10 hr, the reaction mixture containing the anilide derivative poured into ice water, and neutralized with NaOH to give color former I(R = R3 = R4 = R5 = R6 = H, R1 = R2 = Et) [54117-21-4], dark brown in contact with an acid substrate.
IT **56279-07-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with toluidinophenol)
RN 56279-07-3 CAPLUS
CN 2-Naphthalenecarboxylic acid, 3-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:461717 CAPLUS Full-text
DN 83:61717
TI Fluoran derivatives
IN Yahagi, Masakichi; Horiuchi, Shoichi; Toyama, Takahuma; Kashiwagi, Akio
PA Shin Nisso Kako Co., Ltd.
SO Ger. Offen., 86 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2424935	A1	19741219	DE 1974-2424935	19740522
	DE 2424935	C2	19880225		
	JP 50009430	A2	19750130	JP 1973-56278	19730522
	JP 51038245	B4	19761020		
	JP 50042913	A2	19750418	JP 1973-93260	19730822
	JP 51038246	B4	19761020		
	JP 50120636	A2	19750922	JP 1974-26876	19740308
	JP 54026929	B4	19790906		
	FR 2230632	A1	19741220	FR 1974-17660	19740521
	FR 2230632	B1	19790720		
	US 3959571	A	19760525	US 1974-472204	19740521
	IT 1011848	A	19770210	IT 1974-68598	19740521
	GB 1478596	A	19770706	GB 1974-22914	19740522
	US 4410708	A	19831018	US 1976-654732	19760203
	US 4677203	A	19870630	US 1983-504272	19830614
PRAI	JP 1973-56278	A	19730522		
	JP 1973-93260	A	19730822		
	JP 1974-26876	A	19740308		
	US 1974-472204	A3	19740521		
	US 1976-654732	A3	19760203		

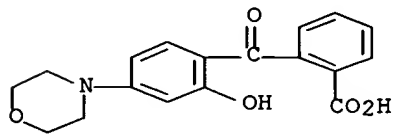
OS MARPAT 83:61717
GI For diagram(s), see printed CA Issue.
AB Fluoran derivs. containing piperidino, pyrrolidino, cyclohexylamino, and morpholino residues in the 3-position were prepared which were less selfdeveloping than corresponding 3-Et2N derivs. and were used as color formers for heat-and pressure-sensitive copying paper. Thus, a mixture of 2-(2-hydroxy-4-piperidinobenzoyl)benzoic acid [55165-06-5] and PhNHC6H3(OH)Me-4,2 [17654-13-6] in H2SO4 was held at 0-10° for 24 hr to give fluoran derivative (I) [55773-64-3]. Similarly, 98 other fluoran derivs. were prepared and their color on acid substrates were given.
IT **55165-07-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with piperidinophenol)
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



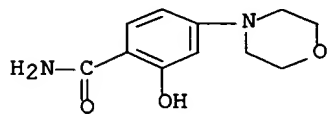
L10 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:155802 CAPLUS Full-text
DN 82:155802
TI Benzophenone derivatives
IN Yahagi, Masakichi; Toyama, Takafumi; Igaki, Tetsuo
PA Nisso Chemical Industries, Ltd.
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 49133367	A2	19741221	JP 1973-47349	19730428
	JP 52010871	B4	19770326		
PRAI	JP 1973-47349	A	19730428		

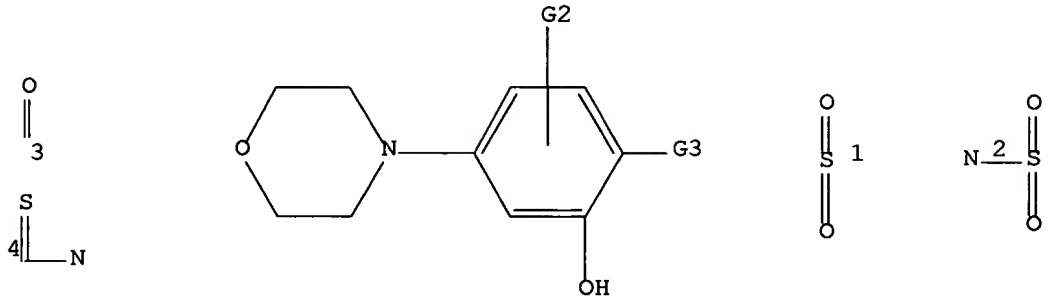
GI For diagram(s), see printed CA Issue.
AB Benzophenone derivs. (I; R = piperidino, pyrrolidino, morpholino) were prepared by reacting m-RC6H4OH with phthalic anhydride (II). Thus, a mixture of 18 g m-pyrrolidinophenol and 15 g II in PhMe was stirred 4 hr at 110° to give 21 g I (R = pyrrolidino).
IT **55165-07-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55165-07-6 CAPLUS
CN Benzoic acid, 2-[2-hydroxy-4-(4-morpholinyl)benzoyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1972:461917 CAPLUS Full-text
DN 77:61917
TI Aminobenzenes. VIII. Rearrangement of phenyl carbamates. Syntheses of 2,4-dioxo-3,4-dihydro-2H-1,3-benzoxazines and salicylamides
AU Effenberger, Franz; Niess, Rolf; Schick, Max
CS Inst. Org. Chem., Univ. Stuttgart, Stuttgart, Fed. Rep. Ger.
SO Chemische Berichte (1972), 105(6), 1926-42
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA German
OS CASREACT 77:61917
GI For diagram(s), see printed CA Issue.
AB Thermal rearrangement of N-aryl-substituted m-RC6H4O2CNHR1 (I, R = pyrrolidinyl, piperidino, or Me2N; R1 = Ph, Bz, or p-ClC6H4CO) obtained from m-RC6H4OH and R1NCO gave 4,2-R(HO)C6H3-CONHR1 (II), whereas N-alkoxy-substituted I gave 2,4-dioxo-3,4-dihydro-2H-1,3-benzoxazines (III). III were cleaved by dilute KOH with CO2 evolution to give II (R1 = H). The mechanism of this Fries rearrangement-like reaction involving an intramol. path is discussed.
IT **37893-38-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 37893-38-2 CAPLUS
CN Benzamide, 2-hydroxy-4-(4-morpholinyl)- (9CI) (CA INDEX NAME)



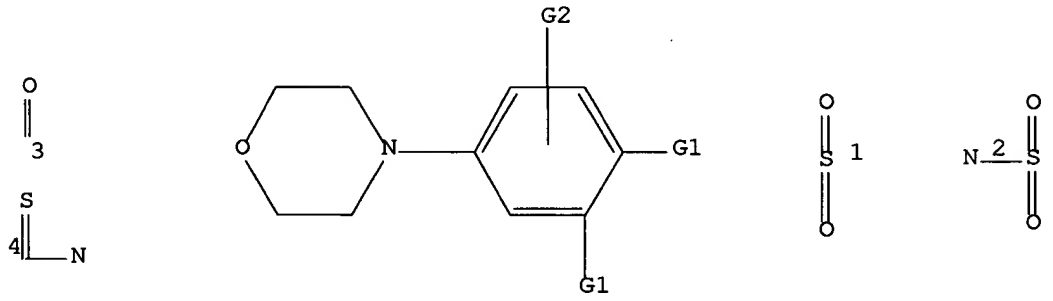
```
=> d l2; d l4; d his; log y
L2 HAS NO ANSWERS
L1                STR
```




```
 G1 C,O,S,N,P
 G2 H,[@1],[@2]
 G3 CN,[@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
L2                QUE  ABB=ON  PLU=ON  L1

L4 HAS NO ANSWERS
L4                STR
```




```
 G1 C,O,S,N,P
 G2 H,[@1],[@2]
 G3 CN,[@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
     (FILE 'HOME' ENTERED AT 19:25:53 ON 17 MAY 2006)
     FILE 'REGISTRY' ENTERED AT 19:26:01 ON 17 MAY 2006
L1                STRUCTURE UPLOADED
L2                QUE L1
L3              2 S L2
     FILE 'STNGUIDE' ENTERED AT 19:26:26 ON 17 MAY 2006
     FILE 'REGISTRY' ENTERED AT 19:27:11 ON 17 MAY 2006
L4                STRUCTURE UPLOADED
L5                QUE L4
L6              1 S L5
L7             71 S L2 FUL
L8              4 S L4 FUL
L9             75 S L7 OR L8
     FILE 'CAPLUS' ENTERED AT 19:27:56 ON 17 MAY 2006
L10            39 S L9
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               200.21     534.36
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                               -29.25     -29.25
```